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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/068,592 05/14/98 MORITA K XIP5934USO

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EXAMINER

WEINER, L

ART UNIT

PAPER NUMBER

1745

DATE MAILED:

12/01/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/068,592

Applicant(s)
Morita et al.

Examiner
Laura W. In r

Group Art Unit
1745



☒ Responsive to communication(s) filed on Oct 26, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1, 3-7, 9-12, 23-27, and 38-40 is/are pending in the application.

Of the above, claim(s) none is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 3-7, 9-12, 23, 27, and 38-40 is/are rejected.

☒ Claim(s) 24-26 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 14

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Response to Amendment

1. Examiner acknowledges the cancellation of claims 13-22 and 28-37 and addition of claim 40 cited in Amendment C dated 10-26-00. Examiner acknowledges the cancellation of claims 2 and 8 and addition of claims 38-39 cited in Amendment B dated 3-16-2000. Claims 1, 3-7, 9-12, 23-27, 38-40 have been examined on their merits.

Response to Arguments

2. Applicant's arguments filed 10-26-00 have been fully considered but they are not persuasive. Applicant argues that JP 8-104510 does not teach a carbon material being nearly spherical or ellipsoidal because the specification teaches that prior art which are pulverized or crushed carbon material are not nearly spherical or ellipsoidal. This is irrelevant because the specification is not comparing to the closest prior art which is the JP 8-104510 reference. The specification is not using the carbon material that is taught in JP 8-104510 but instead is making an inference that all carbon material that is crushed or pulverized would not be spherical or ellipsoidal but it is unclear what are the boundaries for "nearly spherical" because this is relevant term. In addition, JP 8-104510 teaches the carbon material can have a specific surface area of 5 m²/g or less. Therefore the rejections still stands.

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Applicant argues that Miyabayashi et al. teaches that the carbon material must be covered with a large amount of amorphous layer, leading to undesirable amorphous-rich carbon material when the invention has amorphous carbon material content of about 10-30% maximum versus Miyabayashi et al. which has amorphous carbon content of 35, 47 and 50 wt% but this is irrelevant because the carbon content is not claimed in the claims. Miyabayashi et al. teaches the carbon material can have a specific surface area of 5 m²/g or less. Therefore the rejection stands.

Claim Rejections - 35 USC § 112

3. Claims 27 and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 is rejected because it is unclear what is meant by “the coated material of claim 23” because claim 23 is a method claim and claim 23 depends from claim 1 which is a product claim. Should this claim be instead “the coated carbon material of claim 1”? This makes the claim vague and indefinite.

Claim 40 is rejected because it is unclear what is “c” is this defining “ the covering ratio? If it is then the claim should state “having a covering ratio “c”...”.

Claim Rejections - 35 USC § 102

4. Claims 1, 5; 7, 11 are rejected under 35 U.S.C. 102(a) as being anticipated by JP 8-104510, abstract.

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JP 8-104510 teaches a carbon composite material with a multilayer structure which consists of carbonaceous particles which are wholly or partially coated with a carbon material having a true density of at least 1.80 g/cm³, a BET specific surface area of up to 30 m²/g and an average particle diameter of up to 35 microns. JP 8-104510 teaches dispersing carbonaceous particles in a heavy oil to bring them into contact and to allow the surface and pores of the carbonaceous particles to be impregnated with or adsorb the polycyclic aromatic molecules.

Claim Rejections - 35 USC § 103

5. Claims 1, 3-5, 38; 7, 9-11, 39; 23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Miyabayashi et al. (EP 0 549 802 A1).

Miyabayashi et al. teaches an electrode for secondary batteries which comprises a carbonaceous material of the multilayer structure comprising a surface layer and the nucleus enveloped therein and satisfies the following conditions: (1) a true density of not less than 1.80 g/cm³, etc. Miyabayashi et al. teaches on page 2, line 57 to page 3, line 3, that the carbonaceous material should most preferably be 2.20-2.23 g/cm³. Miyabayashi et al. teaches on page 5, lines 5-14, that d₀₀₂ is 3.35 to 3.45 Å. Miyabayashi et al. teaches on page 6, lines 10-11, 12-14, that the diameter is 1-25 μm and the length is preferably 10 mm or shorter, more preferably 5 mm or shorter and that the specific surface area is most preferably 2-8 m²/g.

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In the event any differences can be shown for the product of the product by process claims 38-39, as opposed to the product taught by Miyabayashi et al., such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. *In re Thrope* 227 USPQ 964; (*Fed. Cir.* 1985).

With respect to the product by process claims 38-39, the determination of patentability is based upon the product itself not upon the method of its production. *In re Thrope* 227 USPQ 964; *In re Brown* 173 USPQ 685; *In re Bridgeford* 149 USPQ 55; *In re Wertheim* 191 USPQ 90. Any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the Examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the Applicants to establish that their product is patentably distinct. *In re Brown* 173 USPQ 685 and *In re Fessmann* 180 USPQ 324.

6. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyabayashi et al. (EP 0 549 802 A1).

Miyabayashi et al. teaches an electrode for secondary batteries which comprises a carbonaceous material of the multilayer structure comprising a surface layer and the nucleus enveloped therein. Miyabayashi et al. teaches on page 6, lines 10-11, 12-14, that the diameter is 1-

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25 um and more preferably 2-20 um and the length is preferably 10 mm or shorter, more preferably 5 mm or shorter and that the specific surface area is most preferably 2-8 m²/g.

Miyabayashi et al. discloses the claimed invention as explained above except for specifically teaching that the volume-based integrated value of particles having a diameter of 1 um or less is 10% or less.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have 10% or less of particles having a diameter of 1 um or less because since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Allowable Subject Matter

7. Claims 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

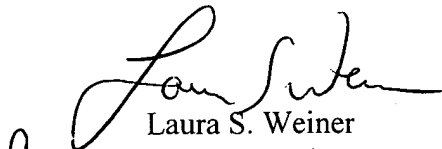
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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Weiner whose telephone number is (703) 308-4396. The examiner can normally be reached on Monday-Friday from 7:30 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maria Nuzzolillo, can be reached on (703) 305-3776. The official fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Laura S. Weiner
Patent Examiner
Art Unit 1745
November 29, 2000